

## WHAT IS CLAIMED IS:

Sub B17  
1. A method of relocating a first file, having portions on-disk and portions migrated to remote storage, to a second file in a computer system, comprising:

5 allocating space for said second file corresponding to said on-disk portions of said first file;

relocating said on-disk portions of said first file to the corresponding portions allocated for said second file; and

10 updating metadata, previously generated for use with said first file, for use with said second file.

2. A method according to claim 1, wherein said first file and said second file are co-located on the same volume.

3. A method according to claim 1, wherein said first file and said second file are located on  
15 different volumes.

4. A method according to claim 1, wherein a first file server services a first volume having a first file, said first file with portions migrated to remote storage, and wherein said first file is  
20 relocated to a second file for storage in a second volume serviced by a second file server.

5. A method according to claim 4, wherein said metadata is passed from said first file server to said second file server for use in connection with said second file.

6. A method according to claim 1, wherein said relocating is a move operation.

7. A method according to claim 1, wherein said relocating is a copy operation.

8. A method according to claim 1, wherein said first file is deleted after said relocating.

9. A computer-readable medium having computer-executable instructions for instructing a computer to perform the method recited in claim 1.

10. A data structure stored on a computer readable medium for storing metadata relating to a relocated file's migration characteristics, comprising:

an identifier identifying the relocated stream of data;  
data representative of a storage service used in connection with the migrated portions of said relocated files; and  
data representative of the memory mappings of said relocated file.

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11. A data structure according to claim 10, further comprising temporal data relating to said relocated stream of data.

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12. A data structure according to claim 10, wherein said data structure is formatted according to a scriptable interface capable of being incorporated into World Wide Web components.

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13. A data structure according to claim 10, wherein said data structure is formatted according to at least one of extensible markup language (XML), distributed component object model (DCOM) and Java.

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14. A modulated data signal for carrying information encoded in a data structure as recited in claim 10.

15. An application programming interface (API) for use in a computer system, whereby said interface provides a standardized way to communicate metadata, representative of a file's distributed storage relationships, among file servers.

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16. An API according to claim 15, whereby said interface provides a standardized way to communicate information about portions of a file that have been migrated to remote storage.

17. A computer system, comprising:

a source file, having portions migrated to remote storage;

a target file, wherein said source file is to be relocated to said target file; and

5 an application programming interface whereby said interface provides a standardized way to relocate said source file

18. A computer system according to claim 17, wherein said API further provides a standardized way to update migration metadata, formerly describing migration characteristics of said source file, to describe migration characteristics of said target file.

19. A computer system according to claim 17, wherein said API further provides a standardized way to communicate migration metadata, from a first server to a second server for use with said target file.

20. A computer system according to claim 17, wherein said source file and said target file are located on the same volume.

21. A computer system according to claim 17, wherein said source file and said target file are located on different volumes.

22. A computer system according to claim 17, wherein said target file is serviced by an second HSM system that is different from a first HSM system servicing the source file, and wherein said second HSM system generates metadata for the relocated target file.

23. A computer system according to claim 17, wherein a file server servicing said source file is different from a file server servicing said target file.

24. A computer system according to claim 17, wherein said source file is to be moved to said target file.

25. A computer system according to claim 17, wherein said source file is to be copied to said target file.

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